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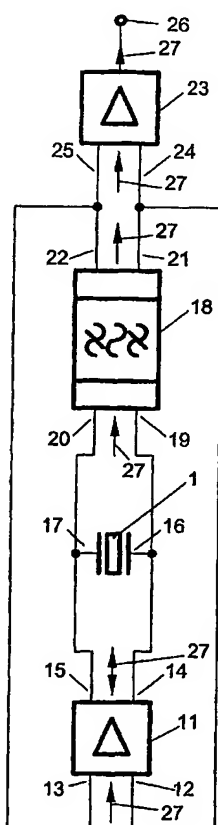
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(54) Title: AN OSCILLATOR CIRCUIT FOR GENERATING A HIGH-FREQUENCY ELECTROMAGNETIC OSCILLATION



(57) **Abstract:** An oscillator circuit for generating a high-frequency electromagnetic oscillation, comprises:- an amplifier configuration with at least one input and at least one output,- an oscillator crystal connected to at least one of the outputs of the amplifier configuration,- a bandpass filter configuration, which is connected, with at least one input, to the oscillator crystal and the at least one output of the amplifier configuration connected to the oscillator crystal, and back coupled, with at least one output, to the input, or at least one of the inputs, of the amplifier configuration. Through dimensioning of the amplitude-frequency characteristic and/or the phase-frequency characteristic of the band-pass filter configuration as a function of the amplitude-frequency characteristic and the phase-frequency characteristic of the amplifier configuration and the crystal oscillator, the oscillation condition is hereby fulfilled exclusively for a selected harmonic of the oscillator crystal, and the high-frequency, electromagnetic oscillation formed by this selected harmonic of the oscillator crystal is available at the output of the bandpass filter configuration. This oscillator circuit is simply constructed and enables operation that is at least largely non-susceptible to interference.

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